



September 20, 2006

Byron Jefferson
P.O. Box 161
Lincoln, DE 19960

RE: PLUS review – PLUS 2006-08-12; Pine Haven Estates

Dear Mr. Jefferson:

Thank you for meeting with State agency planners on August 30, 2006 to discuss the proposed plans for the Pine Haven Estates project to be located on the south side of Route 404, approximately 1,150 ft. northwest of Sussex County road 580.

According to the information received, you are seeking a site plan review for 68 residential units on 38 acres located in Level 4.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

The following are a complete list of comments received by State agencies:

Office of State Planning Coordination – Contact: Bryan Hall 739-3090

This project represents a major land development that will result in 68 residential units in an Investment Level 4 area according to the *2004 Strategies for State Policies and Spending*. This project is also located within the Rural area according to the Sussex County comprehensive plan. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed is likely to bring more than 150 new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

Division of Historical and Cultural Affairs – Contact: Alice Guerrant 739-5685

The Division of Historical and Cultural Affairs is opposed to this development in Level 4. It will lead to the destruction of part of the historic agricultural landscape and to adverse noise and visual effects on nearby historic properties. The National Register-listed Scott's Store (S-823) is just to the east of this development. The Wm Ross House (S-1755; Beers Atlas of 1868) or its replacement is within this parcel; the owner/developer indicated that this would remain. There is a moderate potential for prehistoric-period archaeological sites in some areas of the parcel. There are a number of early to mid-20th c. historic properties across Seashore Hwy. from this parcel.

Small, rural, family cemeteries often are found in relation to historic farm complexes, such as the Ross House, usually a good distance behind or to the side of the house. The developer should be aware of Delaware's Unmarked Human Remains Act of 1987, which

governs the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out, and the developer may want to hire an archaeological consultant to check for the possibility of a cemetery here. The DHCA would have to have a copy of any archaeological report done for this purpose. They will be happy to discuss these issues with the developer; the contact person for this program is Faye Stocum, 302-736-7400.

If this project does proceed, They request that there be sufficient landscaping to protect the nearby historic properties from any adverse visual or noise effects. They would also appreciate the opportunity to examine the area for archaeological sites, to learn something about their location, nature, and extent prior to any ground-disturbing activities.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Because the development is proposed for a Level 4 Area, it is inconsistent with the *Strategies for State Policies and Spending*. As part of our commitment to support the *Strategies*, DelDOT refrains from participating in the cost of any road improvements needed to support this development and is opposed to any road improvements that will substantially increase the transportation system capacity in this area. DelDOT will only support taking the steps necessary to preserve the existing transportation infrastructure and make whatever safety and drainage related improvements are deemed appropriate and necessary. The intent is to preserve the open space, agricultural lands, natural habitats and forestlands that are typically found in Level 4 Areas while avoiding the creation of isolated development areas that cannot be served effectively or efficiently by public transportation, emergency responders, and other public services.

DelDOT strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in approved Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

If this development proposal is approved, notwithstanding inconsistencies with the relevant plans and policies, DelDOT will provide technical review and comments.

The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-9071

Investment Level 4 Policy Statement

This project is proposed for an Investment Level 4 area as defined by the *Strategies for State Policies and Spending* and is also located outside of a designated growth area in the relevant municipal and county certified comprehensive plans. According to the *Strategies* this project is inappropriate in this location. In Investment Level 4 areas, the State's investments and policies, from DNREC's perspective, should retain the rural landscape and preserve open spaces and farmlands. Open space investments should emphasize the protection of critical natural habitat and wildlife to support a diversity of species, and the protection of present and future water supplies. Open space investments should also provide for recreational activities, while helping to define growth areas. Additional state investments in water and wastewater systems should be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development.

With continued development in Investment Level 4 areas, the State will have a difficult, if not impossible, time attaining water quality (e.g., TMDLs) and air quality (e.g., non-attainment areas for ozone and fine particulates) goals. Present and future investments in green infrastructure, as defined in Governor Minner's Executive Order No. 61, will be threatened. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

This particular development certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. Of particular concern are: potential impacts to two out of three layers of green infrastructure (cropland and working forestland), the increase in impervious cover, the loss/fragmentation of 4 out of 16.5 acres of forest, and the project's proximity to the Nanticoke Wildlife Area. While mitigating measures such as conservation design, central wastewater systems instead of individual on-site septic systems, and other best management practices may help mitigate impacts from this project, not doing the project at all is the best avenue for avoiding negative impacts. As such, this project will receive no financial, technical or other support of any kind from DNREC. Any required permits or other authorizations for this project shall be considered in light of the project's conflict with our State growth strategies.

Soils

According to the Sussex County soil survey, Evesboro, Rumford, Sassafras, Woodstown and Fallsington were mapped on subject parcel. Evesboro is an excessively well-drained upland soil that has moderate limitations on account of its rapid permeability. Rumford and Sassafras are well-drained upland soils that, generally, have few limitations for

development. Woodstown is a moderately well-drained soil of low-lying uplands that has moderate limitations for development. Fallsington is a poorly-drained wetland associated (hydric) soil that has severe limitations for development.

It should also be noted that the soils mapped (Fallsington) on subject parcel(s) are likely to have a seasonal high water table within one-foot of the soil surface. Building in such soils is likely to leave prospective residents of this and adjoining properties susceptible to future flooding problems from groundwater-driven surface water ponding, especially during extended periods of high-intensity rainfall events such as tropical storms/hurricanes or “nor’easters.” This is in addition to increased flooding from surface water runoff emanating from future created forms of structural imperviousness (roof tops, roads, and sidewalks). The extensive ditching network throughout this parcel is further evidence of a high water table and the parcel’s increased susceptibility to future flooding events.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine forested wetland on this parcel. Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. The developer should maintain a 100-foot vegetated buffer from the wetlands. There should not be any buildings or associated infrastructure within the buffer.

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In situations where the applicant believes that the delineated wetlands on their parcel are nonjurisdictional isolated wetlands, the Corps must be contacted to make the final jurisdictional assessment. They can be reached by phone at 736-9763.

In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Because there is strong evidence that federally regulated wetlands exist on site, a wetland field delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-9943 to schedule a meeting.

Impervious Cover

Based on a review of the PLUS application, post-development surface imperviousness is estimated to be about 14 percent. It is not clear from the information submitted whether this is a reasonable estimate or not. The applicant should recognize that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks and roads) should be accounted for when calculating surface imperviousness, and make certain that they are included in the finalized calculation.

Studies link increases in impervious cover to decreases in water and habitat quality. Studies have also firmly established that irreversible declines in water and habitat quality begin once aggregate watershed surface imperviousness exceeds 10 percent. Since the amount of imperviousness generated by this project is likely to be much higher than the desirable watershed threshold of 10 percent (reported as 14%), it underscores the importance of a proactive strategy that helps reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials (“pervious pavers”) in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Marshyhope watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. In the Marshyhope watershed, “target-rate-nutrient reductions” of 30 and 50 percent will be required for nitrogen and phosphorus, respectively.

TMDL Compliance through the Pollution Control Strategy (PCS)

As indicated above, Total Maximum Daily loads (TMDLs) for nitrogen and phosphorus have been proposed for both the Marshyhope watershed. The TMDL calls for a 30 and 50% reduction in nitrogen and phosphorus from baseline conditions. A pollution control strategy will be used as a regulatory framework to ensure that these nutrient reduction targets are attained. The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of Best Management Practices such as wider vegetated buffers along watercourses, increasing passive, wooded open space, using enhanced nutrient removal wastewater technologies, and the use of stormwater management treatment trains. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Water Supply

The project information sheets state that water will be provided to the project by a central water system and individual on-site wells. Our records indicate that the project site is not located in an area where public water service is available. Any public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCNs and the application process can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site public well(s) be needed, it (they) must be located at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Sediment and Erosion Control/Stormwater Management

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval as well as construction inspection will be coordinated through the Sussex County Conservation District. Contact the Sussex Conservation District at (302)856-7219 for details regarding submittal requirements and fees.

A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to the Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.

Applying practices to mimic the pre-development hydrology on the site, promote recharge, maximize the use of existing natural features on the site, and limit the reliance on structural stormwater components, such as maintaining open spaces, should be considered in the overall design of the project as a stormwater management technique. Green Technology BMPs must be given first consideration for stormwater quality management. Each stormwater management facility should have an adequate outlet for release of stormwater.

It is strongly recommended that you contact the reviewing agency to schedule a preliminary meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion.

Open Space

To maximize the existing buffering capacity and wildlife habitat on site, community open space should be designated along the existing woodland edge. In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Doing so will provide wildlife habitat and it will create recreational opportunities for residents. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces. Reforestation efforts should be targeted to open space areas adjacent to the forest. In addition, the community should

be provided with a detailed landscape management plan that outlines how to manage each open space area, as well as invasive species management.

Site Visit Request

DNREC has not surveyed this property; therefore, it is unknown if there are state-rare or federally listed plants, animals or natural communities at this project site that would be affected by project activities. *Pseudotriton montanus* (mud salamander) occurs within forested wetlands in the general area, and could exist at the project site since forested wetlands are present.

In order to provide more informed comments and to make reasonable recommendations, our program botanist and zoologist request the opportunity to survey the forested and wetland resources which could potentially be impacted by the project. This would also allow the applicant the opportunity to reduce potential impacts to rare species and unique habitats and to ensure that the project is environmentally sensitive. In addition, a survey of the project site will give staff an opportunity to document the biodiversity of the property before construction activities begin. Please contact Bill McAvoy or Kitt Heckscher at (302) 653-2880 to set up a site visit.

Forest Preservation and Wetland Issues

As indicated in comments we submitted to Sussex County during July 2006, most of this development occurs on a portion of the parcel that is non-forested, however there are still 13 lots and infrastructure in the forested portion. The forest on this property is part of a larger forest block and some species of wildlife are dependent on larger, connected areas of forest. Forest fragmentation separates wildlife populations, increases road mortality, and increases “edge effects” that leave many forest dwelling species vulnerable to predation and allows the infiltration of invasive species. In addition, when forested areas are cleared wildlife must disperse into the surrounding area which can result in human/animal conflicts including interactions on the roadway.

The applicant also estimated approximately ½ acre of wetlands on this site (other than Iron Mine Branch); however, state wetland maps indicate a large area of forested wetlands. The applicant should consider having the wetlands delineated by a certified wetland scientist to ensure that wetlands are not impacted if this project moves forward.

To preserve forest and protect wetlands we make the following site plan recommendations:

- 1. DNREC recommends that the applicant consider omitting all or part of lot nos. 56-68 which occur within the forest. At the very least, clearing for structures and infrastructure should be minimized.**
- 2. The site plan indicates two areas designated for stormwater detention ponds that will require tree clearing. Given the benefit of trees in erosion control and flood abatement, trees should not be cleared for stormwater management ponds. An alternate method of stormwater management (such as bioswales, etc.) should be employed or the ponds relocated to a non-forested portion of the project area. One of the stormwater areas appears to be too close to Iron Mine Branch anyway and should be relocated.**
- 3. Although leaving a forest intact is more beneficial to the existing wildlife and is preferential to clearing, if clearing has to occur, we recommend that trees not be removed from April 1st to July 31st to reduce impacts to nesting birds and other wildlife species that utilize forests for breeding. This recommendation would only protect those species during the breeding season; once trees are cleared the result is an overall loss of habitat.**

Plant Rescue

Since forested wetlands are to be destroyed, filled, or disturbed. DNREC recommends that the developer/landowner contact the Delaware Native Plant Society to initiate a plant rescue. Selected plants from the site of disturbance will be collected by Society members and transplanted to the Society's nursery. Plants will then be used in restoration projects and/or sold at the Society's annual native plant sale. This can be done at no expense or liability to the developer/landowner. Please contact Lynn Redding at (302) 736-7726, (lynn_redding@ml.com) or William A. McAvoy at (302) 653-2880, (william.mcavoy@state.de.us).

Nuisance Waterfowl

Stormwater management ponds may attract waterfowl like resident Canada geese and mute swans that will create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. However, native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (at least 50 feet) around ponds, are not as attractive to geese because they do not feel safe from predators and other disturbance when their view of the area is blocked. These plantings should be completed as soon as possible as it is easier to deter geese when there

are only a few than it is to remove them once they become plentiful. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with proper landscaping, monitoring, and other techniques, geese problems can be minimized

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 5.2 tons (10,437.3 pounds) per year of VOC (volatile organic compounds), 4.3 tons (8,641.4 pounds) per year of NO_x (nitrogen oxides), 3.2 tons (6,375.8 pounds) per year of SO₂ (sulfur dioxide), 0.3 ton (567.6 pounds) per year of fine particulates and 436.5 tons (873,066.0 pounds) per year of CO₂ (carbon dioxide).

However, because this project is in a level 4 area, mobile emission calculations should be increased by 118 pounds for VOC emissions for each mile outside the designated growth areas per household unit; by 154 pounds for NO_x; and by 2 pounds for particulate emissions. A typical development of 100 units that is planned 10 miles outside the growth areas will have additional 59 tons per year of VOC emissions, 77 tons per year of NO_x emissions and 1 ton per year of particulate emissions versus the same development built in a growth area (level 1,2 or 3).

Emissions from area sources associated with this project are estimated to be 2.1 tons (4,209.8 pounds) per year of VOC (volatile organic compounds), 0.2 ton (463.2 pounds) per year of NO_x (nitrogen oxides), 0.2 ton (384.4 pounds) per year of SO₂ (sulfur dioxide), 0.2 ton (496.0 pounds) per year of fine particulates and 8.5 tons (17,065.7 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 0.8 tons (1,668.5 pounds) per year of NO_x (nitrogen oxides), 2.9 tons (5,803.4 pounds) per year of SO₂ (sulfur dioxide) and 428.0 tons (856,000.3 pounds) per year of CO₂ (carbon dioxide).

	VOC	NO _x	SO ₂	PM _{2.5}	CO ₂
Mobile	5.2	4.3	3.2	0.3	436.5
Residential	2.1	0.2	0.2	0.2	8.5
Electrical Power		0.8	2.9		428.0
TOTAL	7.3	5.3	6.3	0.5	873.0

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 0.8 tons of nitrogen oxides per year and 2.9 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades,
high performance windows,
controlled air infiltration,
upgraded heating and air conditioning systems,
tight duct systems and
upgraded water-heating equipment.”

The Energy office in DNREC is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. They highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

They also recommend that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

State Fire Marshal’s Office – Contact: Duane Fox 856-5298

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal’s Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**

- Since the dwellings of the subdivision are proposed to be served by individual on-site wells (No Central or Public Water System within 1000' of property), set back and separation requirements will apply.

b. **Accessibility:**

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Seashore Hwy must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

c. **Gas Piping and System Information:**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

d. **Required Notes:**

- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded

from our website: www.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Scott Blaier 698-4500

The proposed development is in an area designated as Investment Level 4 under the *Strategies for State Policies and Spending*. The *Strategies* do not support this type of isolated development in this area. The intent of this plan is to preserve the agricultural lands, forestlands, recreational uses, and open spaces that are preferred uses in Level 4 areas. The Department of Agriculture opposes development which conflicts with the preferred land uses, making it more difficult for agriculture and forestry to succeed, and increases the cost to the public for services and facilities.

More importantly, the Department of Agriculture opposes this project because it negatively impacts those land uses that are the backbone of Delaware's resource industries - agriculture, forestry, horticulture - and the related industries they support. Often new residents of developments like this one, with little understanding or appreciation for modern agriculture and forestry, find their own lifestyles in direct conflict with the demands of these industries. Often these conflicts result in compromised health and safety; one example being decreased highway safety with farm equipment and cars competing on rural roads. The crucial economic, environmental and open space benefits of agriculture and forestry are compromised by such development. We oppose the creation of isolated development areas that are inefficient in terms of the full range of public facilities and services funded with public dollars. Public investments in areas such as this are best directed to agricultural and forestry preservation.

The proposed development is adjacent or near several properties enrolled in the State's Agricultural Lands Protection Program (Elmer-Wink Vanderwende District, Vanderwende-Heifer Expansion of the Rust District, and Ledenham-Vanderwende District). Therefore, the farming activities conducted on this property will be protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm

operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

In addition to conforming to required setback and buffer requirements, the Department further requests that the developer keep houses, driveways, roads, infrastructure, etc. the maximum distance possible away from adjacent agricultural lands, and establish an effective landscaped buffer through consultation with the Department of Agriculture's Forest Service.

Much of this site has been designated as having "good" ground-water recharge potential. DNREC has mapped all ground-water recharge-potential recharge areas for the state, and a "good" rating designates an area as having important groundwater recharge qualities.

Maintaining pervious cover in excellent and good recharge areas is crucial for the overall environmental health of our state and extremely important to efforts which ensure a safe drinking water supply for future generations. Retention of pervious cover to ensure an adequate future water supply is also important for the future viability of agriculture in the First State. The loss of every acre of land designated as "excellent" and "good" recharge areas adversely impacts the future prospects for agriculture in Delaware. The developer should make every effort to protect and maintain valuable ground-water recharge potential areas.

This site overlaps with the State's Green Infrastructure Investment Strategy Plan. The Crop Land layer is present over the entire site. This designation identifies areas of the state that have viable and valuable agricultural cropland, as discussed in Governor Minner's Executive Order Number 61. Areas such as these should be preserved as such, and not developed for residential use.

The Delaware Department of Agriculture supports growth which expands and builds on existing urban areas and growth zones in approved State, county and local plans. Where additional land preservation can occur through the use of transfer of development rights (TDRs), and other land use measures, we will support these efforts and work with

developers to implement these measures. If this project is approved we will work with the developers to minimize impacts to the agricultural and forestry industries.

Right Tree for the Right Place

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

Native Landscapes

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

Tree Mitigation

The Delaware Forest Service encourages the developer to implement a tree mitigation program to replace trees at a 1:1 ratio within the site and throughout the community. This will help to meet the community’s forestry goals and objectives and reduce the environmental impacts to the surrounding natural resources. To learn more, please contact our offices at (302) 349-5754.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is to develop 68 residential units on 38 acres located on the south side of Route 404, west of Bridgeville. According to the *State Strategies Map*, the proposal is located in an Investment Level 4 area. As a general planning practice, DSHA encourages

residential development only in areas where residents will have proximity to services, markets, and employment opportunities, such as Investment Level 1 and 2 areas outlined in the State Strategies Map. Since the proposal is located in an area targeted for agricultural and natural resource protection, and therefore inconsistent with where the State would like to see new residential development, DSHA does not support this proposal.

Department of Education – Contact: John Marinucci 739-4658

DOE recognizes that this development project is in level 4 of the State Strategies for Policies and Spending and as such, DOE does not support the approval of this project. This proposed development is within the Woodbridge School District.

DOE offers the following comments on behalf of the Woodbridge School District.

1. Using the DOE standard formula, this development will generate an estimated 34 students.
2. DOE records indicate that the Woodbridge School Districts' *elementary schools are very close to 100% of current capacity* based on September 30, 2005 elementary enrollment.
3. DOE records indicate that the Woodbridge School Districts' *secondary schools are not at beyond 100% of current capacity* based on September 30, 2005 secondary enrollment.
4. This development will create additional elementary and secondary student population growth which will further compound the existing shortage of space. The developer is strongly encouraged to contact the Woodbridge School District Administration to address the issue of school over-crowding that this development will exacerbate.
5. DOE requests developer work with the Woodbridge School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the local school district.

Sussex County – Contact: Richard Kautz 855-7878

Section 99-17c of the County Subdivision Ordinance requires street intersections at 90 degrees. The Pine Haven Circle intersection with Pine Haven Drive does not appear to meet that requirement.

Article IV of the Subdivision Ordinance requires that the Preliminary Plat of the subdivision "show the general plan for the ultimate development of the property,

including as much of the surrounding area as may be necessary for an adequate consideration of the land to be subdivided." The PLUS application refers to the subdivision of parcel 1.02 yet there are 15 proposed lots from parcel 1.01. Parcel 1.01 should be shown along with the proposed lots and without a "remainder".

Because this project is an AR-1 Cluster subdivision, the developer must include in the application a plan for the management of all open space. Also, the developer must document for the Planning and Zoning Commission how the proposed development: provides for a total environment and design which are superior to that which would be allowed under the standard lot option; preserves the natural environment and historic or archeological resources; and, will not have an adverse effect on any of the items included under Ordinance Number 1152 (County Code 99-9C). These issues can be addressed by including in the application an explanation of how the developer plans to mitigate the issues raised by the State agencies.

The Sussex County Engineer Comments: The project proposes to develop using a private central community wastewater system and individual septic for 13 conventional lots. The Sussex County Engineering Department recommends that the entire subdivision be served through the proposed community wastewater system. We recommend that the wastewater system be operated under a long-term contract with a capable wastewater utility. In addition, we recommend they have a wastewater utility provider prior to approving the project. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A review and approval of the treatment and disposal system by the Sussex County Engineering Department is also required and plan review fees may apply. Disposal fields should not be counted as open space. Wastewater disposal fields should be clearly identified on recorded plots.

The proposed project is within the boundaries of the Western Sussex Planning Area. The Sussex County Engineering Department is currently conducting a planning study of the area. The study is scheduled to be complete by August of 2007. If Sussex County ever provides sewer service, it is required that the treatment system be abandoned and a direct connection made to the County system at the developers and/or owners expense.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

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Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland".

Constance C. Holland, AICP
Director

CC: Sussex County